

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for the manufacture of a nucleic acid molecule comprising the following steps:
 - (a) providing a first at least partially double-stranded oligonucleotide, whereby the oligonucleotide comprises a first and a second single-stranded overhang,
 - (b) providing a second at least partially double-stranded oligonucleotide, whereby the oligonucleotide comprises a recognition site for a first type IIS restriction enzyme which cuts outside its recognition site, a modification allowing the oligonucleotide to be coupled to a surface and a single-stranded overhang,
 - (c) ligating the first oligonucleotide and the second oligonucleotide via the first single-stranded overhang of the first oligonucleotide and the single-stranded overhang of the second oligonucleotide, generating a first ligation product, whereby the first ligation product comprises a single-stranded overhang essentially corresponding to the second single-stranded overhang of the first oligonucleotide,
 - (d) cutting the first ligation product with the first type H-IIS restriction enzyme thus releasing
 - an elongated first at least partially double-stranded oligonucleotide having a first and a second single-stranded overhang, whereby the first single-stranded overhang is generated through the cutting of the restriction enzyme and whereby the second single-stranded overhang corresponds essentially to the second single-stranded overhang of the first at least partially double-stranded oligonucleotide, preferably the at least partially double-stranded oligonucleotide of step (a), and
 - a truncated second at least partially double-stranded oligonucleotide;
 - (e) immobilising the truncated second at least partially double stranded oligonucleotide of step d), the unreacted second at least partially double-stranded oligonucleotide and/or the uncut first ligation product via the modification to a surface;

(f) optionally repeating steps a) to e), whereby the elongated first at least partially double-stranded oligonucleotide of step d) serves as the first at least partially double-stranded oligonucleotide in step a).

2. (Currently Amended) The method of claim 1, comprising the following step

ca) immobilising the first ligation product via the ~~long~~ single-stranded overhang of the first ligation product to a surface,

3. (Previously Presented) The method of claim 2, wherein the surface comprises a nucleic acid having a single-stranded stretch which is at least partially complementary to the single-stranded overhang of the first ligation product.

4. (Previously Presented) The method of claims 1, 2 or 3, comprising the following step

cb) optionally washing the immobilised first elongation product; and
cc) releasing the immobilised first elongation product from the surface.

5. (Previously Presented) The method of claim 4, wherein the length of the first single-stranded overhang of the first at least partially complementary oligonucleotide has a length of 1, 2, 3, 4 or 5 nucleotides.

6. (Currently Amended) The method of claim 5, wherein the second single-stranded overhang of the first oligonucleotide allows for a stable hybridisation to the single-stranded stretch of the nucleic acid comprised on the surface.

7. (Previously Presented) The method of claim 6, wherein the hybridisation is stable under the reaction conditions of step cb).

8. (Currently Amended) The method ~~according to any of~~ claim 7, wherein the single-stranded overhang has a length from about 5 to 20 nucleotides, from about 10 to 20 nucleotides, from about 15 to 18 nucleotides, from about 5 to 10 nucleotides and from about 6 to 8 nucleotides, depending on the nature of the nucleotides.

9. (Currently Amended) The method of claim 8, wherein the modification is a biotin modification.

10. (Previously Presented) The method of claim 9, wherein the immobilisation of step e) occurs via interaction of the biotin and the surface, whereby the surface preferably comprises a biotin interaction group.

11. (Currently Amended) The method of claim 10, wherein the biotin interaction group is selected from the group comprising ~~avidine, streptavidine, extravidine~~avidin, streptavidin, extravidin, mutants of each thereof and synthetic biotin binding sites.

12. (Previously Presented) The method of claim 11, wherein a part of the nucleic acid to be manufactured is part of the elongated first at least partially double-stranded oligonucleotide.

13. (Previously Presented) The method of claim 12, wherein steps a) to e) are repeated at least once, whereby the nucleotides transferred from the second and any further at least partially double-stranded oligonucleotides provided in step b) to the first at least partially double-stranded oligonucleotides are the nucleic acid to be manufactured or a part thereof.

14. - 67. (Canceled)